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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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VENABLE LLP P.O. BOX 34385 WASHINGTON, DC 20043-9998			EXAMINER CHEN, ALAN S	
			ART UNIT 2182	PAPER NUMBER
			MAIL DATE 09/20/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/813,063

Applicant(s)

DELEEUEW, WILLIAM C.

Examiner

Alan S. Chen

Art Unit

2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-7,9-11,14 and 17-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-7,9-11,14 and 17-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1,4-11,14 and 17-25 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1,4-7,9-11,14,17-20 and 22, are rejected under 35 U.S.C. 102(e) as being anticipated by US Pat. No. 6,973,658 to Nguyen.

### **Independent Claims**

4. Per claim 1, Nguyen discloses an apparatus (*Fig. 1*), comprising: a common computing platform (*Fig. 1, element 110, specifically element 112 is the internal processor used for computing; element 110 is common to all the connectors, element 110 has computing resources and loads the appropriate drivers to establish connection to a external device; Column 5, lines 55+*) a communication device to support simultaneous data communication of first and second external devices (*Fig. 1, element 115; Column 6, lines 38-50 expressly discloses establishing connection between two external devices, each attached to a connector in Fig. 1*), which each communicates

using a respective first or second peripheral data communication protocol (*each peripheral device uses a specific peripheral protocol, e.g., network, USB, video or audio protocol*), with the common computing platform (*Fig. 1, element 110 detects and initiates communication ability of peripheral devices, Column 5, lines 56-67*), which communication device comprises software to dynamically, in real time configure the communication device to communicate using the first and second peripheral data communication protocols (*Column 4, lines 59+ discloses device drivers as the software means to enable the external devices to communicate with their native communication protocol*); and at least first and second communication interfaces (*Fig. 1, elements 124-129*), which each adaptively communicatively couples the configured communication device (*Fig. 1, element 115*) to the common computing platform (*Fig. 1, element 110 the common computing platform is capable of communicating with the communication device in part because of the external devices are communicating over the interfaces/ports, elements 124-129*), each communication interface to recognize and support the first or second peripheral data communication protocol (*Fig. 1, elements 124-129 are recognized and used expressly for the device attached to it*).

5. Per claim 5, Nguyen discloses a system (*Fig. 1*) comprising: a common computing platform (*Fig. 1, element 110*); external devices to communicate with the common computing platform using a respective external device peripheral data communication protocol (*Fig. 1, elements 1840194 are external devices using a specific protocol*); a communication device to support simultaneous communications of the external devices with the common computing platform using at least two peripheral data

communication protocols (*Fig. 1, element 115; Column 6, lines 38-50 expressly discloses establishing connection between two external devices, each attached to a connector in Fig. 1; each external device has its own communication protocol*), the communication device includes software which dynamically, in real time configures the communication device to communicate using the respective external device peripheral data communication protocol (*Column 4, lines 59+ discloses device drivers as the software means to enable the external devices to communicate with their native communication protocol*); and at least two communication subsystems (*Fig. 1, element 105 and 120, both the controller and memory play a role in facilitating the necessary resources for proper communications between the external device and Programmable Coupler and Logic Unit*) which each adaptively couples the common computing platform to the communication device for each external device to communicate to the common computing platform using the respective external device peripheral data communication protocol (*Column 5, lines 55-Column 6 lines 15, Controller, element 105, programs the logic unit, element 110, and memory, element 120, provides resources for the various functional units in Fig. 1 as necessary*).

6. Per claim 14, Nguyen discloses a method (*operations of Fig. 1 embody the method*), comprising: communicatively coupling first and second external devices (*Column 6, lines 39-50 disclose connecting two of the external devices together; Fig. 1, elements 184-194 are the external devices*), each to communicate via a respective first or second peripheral data communication protocol (*each device uses a specific peripheral protocol, e.g., network, USB, video or audio protocol*), to a computing

platform (*Fig. 1, element 110 is the computing platform*) with a communication device (*Fig. 1, element 115; Column 6, lines 38-50 expressly discloses establishing connection between two external devices, each attached to a connector in Fig. 1*), said coupling comprising: dynamically, in real-time configuring the communication device to communicate using the first and second peripheral data communication protocols (*Column 4, lines 59+ discloses device drivers as the software means to enable the external devices to communicate with their native communication protocol*), adaptively coupling to said computing platform (*Fig. 1, element 110*) with a first communication interface (*Fig. 1, elements 124-129 are interface/ports*) using the first peripheral data communication protocol (*Fig. 1, element 110 the common computing platform is capable of communicating with the communication device via a communication protocol in part because of the external devices are communicating over the interfaces/ports, elements 124-129*), and simultaneously adaptively coupling to said computing platform with a second communication interface (*another interface/port from elements 124-129*) using the second peripheral data communication protocol (*Column 6, lines 35-45, two external devices are connected and communicating with each other*).

7. Per claim 18, Nguyen discloses a machine-accessible storage medium (Figs. 1, elements 113 and 120 are memory) including instructions (*Column 5, lines 46-55*) that, when executed by a processor (*Fig. 1, element 112*), cause said processor to execute a method comprising: dynamically, in real time configuring said processor to communicate using first and second peripheral data communication protocols simultaneously (*Column 6, lines 39-50, two peripherals devices having two different communication protocols*

*communicate with each other), and adaptively couple first and second external devices (Fig. 1, elements 184-194, when two devices are attached, they are detected and communication is established automatically), which each communicates using a respective first or second peripheral data communication protocol (each peripheral device uses a specific peripheral protocol, e.g., network, USB, video or audio protocol), to a computing platform (Fig. 1, element 110) with first and second communication interfaces (Fig. 1, elements 124-129) which each to recognize and support a respective first or second peripheral data communication protocol (Fig. 1, elements 124-129 are recognized and used expressly for the device attached to it).*

**Dependent Claims**

8. Per claims 4,17 and 19, Nguyen discloses claims 1,14 and 18, Nguyen dynamically, in real time reconfigures the communication device (*Fig. 1, element 115 can detect and configure more than two peripheral devices*) to communicate using a third peripheral data communication protocol (*Column 6, lines 40-45 disclose two or more connectors, hence two or more devices being coupled and as many protocols as there are devices*) and wherein at least one of the first or second interface devices to recognize the third peripheral data communication protocol (*Column 6, lines 40-45, two or more connectors can be connected and communicating, hence either the first or second external devices can communicate with a third external device having the third protocol*) and adaptively communicatively couple the communication device to the common computing platform for a third external device to communicate to the common

computing platform using the third peripheral data communication protocol (*Fig. 1, element 115, logic unit enables all the protocols to interoperate*).

9. Per claim 6, Nguyen discloses claim 5, Nguyen further disclosing one of said communication subsystems (*Fig. 1, element 105*) includes a device (*Fig. 1, element 105, the controller has various devices, elements 106-108 construed to be coupled to the element 110*) coupled to said common computing platform.

10. Per claim 7, Nguyen discloses claim 6, Nguyen further disclosing said device comprising a coprocessor (*Column 4, lines, 40-50, element 106 is one or more processors*).

11. Per claims 9-11, Nguyen discloses claim 5, Nguyen further disclosing the communication subsystems adapting for various protocols by controlling the loading of drivers and cores (*Column 4, lines 40-60*).

12. Per claim 20, Nguyen discloses claim 18, Nguyen further discloses the first and second peripheral data communication protocols comprise different peripheral data communication protocols (*Fig. 1, all the protocols shown are different*).

13. Per claim 22, Nguyen discloses claim 5, Nguyen further discloses the software configuring the communication device based on the peripheral data communication protocol of a corresponding external device and where each communication subsystem communicates using one of the peripheral data communication protocols (*Fig. 1, based on what external device is connected, the supporting functional blocks load the particular drivers and requisite resources to have the protocol be operable*).

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

16. Claims 21 and 23 are rejected under 35 USC 103(a) as being unpatentable over Nguyen.

Nguyen discloses claims 5 and 18. Fig. 1 of Nguyen shows different peripheral communication protocols, one of them being the USB protocol.

Nguyen does not disclose expressly the peripheral data protocols being the same.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to have more than two USB protocols.

The suggestion/motivation for doing so would have been USB protocols are widely adopted by manufacturers and it is common to have two or more USB ports to

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accommodate the vast selection of USB devices one can use. Furthermore, the USB specification details the USB protocol capable of in essence daisy chaining multiple USB devices with use of a hub. The single port shown in Fig. 1 of Nguyen can actually accommodate more than one device that operates using the USB protocol.

17. Claims 24 and 25 are rejected under 35 USC 103(a) as being unpatentable over Nguyen.

Nguyen discloses claim 1. Fig. 1 of Nguyen shows a plethora of different peripheral communication protocols, and expressly states various other showing that the invention is not limited to simply what is shown (*Column 4, lines 54-58*).

Nguyen does not disclose expressly a peripheral data protocol being wireless and having the wireless transmitting/receiving means in Fig. 1.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to have adopted wireless standards in Nguyen.

The suggestion/motivation for doing so would have been the convenience and growth of wireless standards. Nguyen shows USB and it is well-known in the art of the developments of the wireless USB standard, although not having hit mainstream consumer markets yet. Providing wireless communication would clearly help to lengthen the shelf life of Nguyen's product.

18. Claim 8 is rejected under 35 USC 103(a) as being unpatentable over Nguyen in view of US Pat. No. 5,845,139 to Fischer et al. (*Fischer, previously presented*).

Nguyen discloses claim 7. Nguyen further discloses use of the PCMCIA protocol (*Fig. 1, element 150*).

Nguyen does not disclose expressly the computing platform having a low-power sleep mode where a processor on the I/O card of computing platform is awakened from sleep mode upon occurrence of a predetermined event.

Fischer discloses an I/O card having a processor, specifically a PCMCIA card, that implements SLEEP mode for the express purpose of saving power (*Column 2, lines 20-25*). Fischer further discloses activating the PCMCIA card in a wake-up scenario when the PCMCIA card functionality needs to be used (*Column 2, lines 20+*).

Nguyen and Fischer are analogous art because they are from the same field of endeavor in computing systems utilizing PCMCIA protocol devices.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Nguyen to include a sleep-mode and wake upon activity from the network in Nguyen.

The suggestion/motivation for doing so would have been power saving features and powering up only when processing cycles are needed for more efficient use of power (*Column 2, lines 20-25 of Fischer*).

### **Conclusion**

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within


TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan S. Chen whose telephone number is 571-272-4143. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim N. Huynh can be reached on 571-272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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